

CLAIMS

3 Sub A2 / 1. A sand screen for use in production of hydrocarbons from wells, comprising an intelligent completions device disposed in the sand screen.

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1 2. The sand screen of claim 1, wherein the intelligent completions device comprises a sensor.

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1 3. The sand screen of claim 1, wherein the intelligent completions device comprises a temperature sensor.

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1 4. The sand screen of claim 1, wherein the intelligent completions device comprises a pressure sensor.

1 5. The sand screen of claim 1, wherein the intelligent completions device comprises a flow rate measurement device.

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1 6. The sand screen of claim 1, wherein the intelligent completions device comprises a oil/water/gas ratio measurement device.

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The sand screen of claim 1, wherein the intelligent completions device comprises a scale detector.

1 8. The sand screen of claim 1, wherein the intelligent completions device comprises a sand
2 detection device.

1 9. A gravel pack system, comprising:
2 a sand screen; and
3 an intelligent completions device disposed within the sand screen.

10. The gravel pack system of claim 9, wherein the intelligent completions device comprises
2 a sensor.

11. The gravel pack system of claim 9, wherein the intelligent completions device comprises
2 a temperature sensor.

1 12. The gravel pack system of claim 9, wherein the intelligent completions device comprises
2 a pressure sensor.

1 13. The gravel pack system of claim 9, wherein the intelligent completions device is selected
2 from a flow rate measurement device, an oil/water/gas ratio measurement device, a scale
3 detector, and a sand detection device.

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14. The gravel pack system of claim 9, further comprising a fiber optic cable.

1 15. The gravel pack system of claim 9, further comprising a control line connected to the
2 intelligent completions device.

1 16. The gravel pack system of claim 15, wherein the control line is selected from an electric
2 line and a fiber optic line.

1 17. The gravel pack system of claim 9, further comprising a control line extending from the
2 surface to the intelligent completions device.

1 18. A method for placing a gravel pack around a completion, comprising:
2 gathering data from an intelligent completions device disposed in a sand screen of the
3 completion; and
4 flowing a gravel slurry into the assembly wherein a gravel is deposited between the sand
5 screen and a formation.

1 19. The method of claim 18, wherein the intelligent completions device is a sensor.

1 20. A method of monitoring a well characteristic of a well, comprising:
2 running a control line to an intelligent completions device disposed in a sand screen;
3 running the sand screen into the well; and
4 sending a signal through the control line.

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21. The method of claim 20, wherein the intelligent completions device is a sensor.

1 22. A well completion, comprising:
2 a sand screen positioned adjacent the formation; and
3 a fiber optic line at least a portion of which is attached to the sand screen.

1 23. The well completion of claim 22, further comprising a gravel pack around the sand
2 screen.

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24. A method for gravel packing a well, comprising:
2 running a sand screen into a particular length of the well;
3 extending a fiber optic line into the particular length of the well; and
4 gravel packing the well.

1 25. The method of claim 24, further comprising performing the running step at substantially
2 the same time as the extending step.

1 26. The method of claim 24, further comprising performing the running step before the
2 extending step.

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